INNOVATION IN LANGUAGE LEARNING International Conference

Homo Zappiens et Ludens: Apps as a Context to Develop Students' Speaking Competences in a Gamified Environment

Ionut Capeneata

National University of Science and Technology Politehnica Bucharest – University Centre of Pitești, (PhD Student), Romania

Abstract

The current study started at the beginning of the 2023-2024 school year with a new 10th grade class who studied French as their second modern language (L2 according to the Romanian curriculum) in a high school in Ilfov county. The initial assessment highlighted the students' competences in oral expression were mostly at the A1.1 level according to the CEFRL, their motivation and involvement were low, and they were reluctant to speaking in French. In order to improve the students' acquisition a single group pre-post intervention was designed that aimed at using: applications as real-life communication contexts to develop oral expression; gamification as a framework to give meaning to the class integration of multiple applications; games to maintain the level of student involvement. Evaluation grids and progress tests were applied every month in order to assess the speaking competences. Also observation grids and questionnaires monitored the students' involvement and motivation. After three months, the results were already positive: students' speaking competences improved, and their motivation and involvement increased. As the results showed, at the end of the school year, their speaking competences in French improved, to the A2.2 level. The observation grids showed that their motivation increased from the beginning and then was almost constant during the school year. The final questionnaire results showed that the students considered the learning had been more meaningful and funnier.

Keywords: *Apps, gamification, speaking*

1. Introduction

During the last years, applications have become a powerful tool to teach modern foreign languages, as they are fun, and increase the students' motivation and involvement. In Romania, when teaching French, speaking can be a very challenging competence to structure, as the students are reluctant to it, because they are afraid of being laughed at if they do mistakes.

The current study is focused on a group of 10th grade students at level A1.1 for French oral expression according to the CEFRL. At the beginning of the 2023-2024 school year these students' speaking competences were rather poor – mostly A1.1. Also they were very reluctant to speaking, being afraid that they might be mistaken and laughed at by classmates.

The 10th graders needed an authentic environment for speaking as well as an interactive and student-cantered learning activities. Apps could provide such contexts of communication and educational approaches. Nevertheless, there is a challenge – how to create a framework for the use of more than one application, to make this approach more meaningful, as they are digital natives and the systematic intervention by a single app could become boring.

A solution to this challenge is the one attempted in this study, i.e. the use of applications in a gamified environment. Thus the aim of this study is to investigate if gamification can improve students' speaking competences in French, while increasing motivation and reducing anxiety that students associated with speaking.

2. Literature Review

The idea of play in culture and in education is not new. Huizinga [1] argues in Homo Ludens that it is a fundamental part of human culture. Moreover, he also states that playing is not childish or unimportant, it is the foundation of civilization itself and that culture arises in and as a play.

Ween and Vrakking [2] coined the syntagm homo zappiens do describe a new generation of students', who grew up while exposed to new media and who developed a new way of learning. According to the

same authors, being exposed for long periods of time to the new media, the students learn more effectively when they use the technology.
In the last two decades, the use of apps became more and more popular when teaching foreign languages, but the studies focused on grammar, vocabulary and receptive competences, with some research gaps in the use of apps to structure productive competences.
Burston [3] finds that there is a significant growth in language learning apps, ranging from vocabulary to comprehensive skills-development. In terms of speaking, McCrocklin [4] argues that they can support practice frequency and learner autonomy. Moreover, Godwin-Jones [5] argues that apps can expose students to authentic communicative scenarios by integrating contextualized speaking tasks.
Nevertheless, Saran, Seferoglu and Cagıltay [6] point out that mobile-assisted speaking tasks increase students' confidence and involvement as they reduce the fear of negative evaluation.
As far as the framework is concerned, gamification is the use of specific game elements in nonspecific contexts, and has recently started being used in education with positive results. It can turn the student from a passive receiver to an active participant, increasing engagement, motivation, and learning outcomes [7]. According to Hamari, Koivisto, and Sarsa [8], gamification can enhance motivation and, in structuring speaking skills, can provide a context for real-time interaction and instant feedback mechanisms, which can lead to fluency building, providing at the same time, a low-stakes communicative practice which reduces the fear of errors [9].
However, integrating gamification when teaching foreign languages is still an emerging field in the didactics of Modern Foreign Languages and is not centered on teaching a specific competence. The studies I identified are centered on teaching English, leading to a research gap in the case of French and in structuring students' speaking competences in French. Therefore, the current study provides data in this respect.

2.1. Methodology

This study is a Single-Group Pre-Post Intervention. The target group of the research is represented by 28 students, 10th graders from Ilfov county, Romania, with low competences in French oral expression – mostly A1.1 and reluctant to speak French. They had been studying French for six years (approx. 200 hours except self-study) and, according to the national curriculum, they should have reached at least the B1.1 level for all competences. When starting grade 10, in terms of speaking, the students should have been able to:

- Describe, in a simple manner, an event or an experience from their personal life, based on an image or a given plan
- Express their position (for or against) in a discussion
- Communicate in order to accomplish a simple task.

At the beginning of the school year, the initial test showed poor speaking competences in French – mostly A1.1: the students were able to produce simple, mainly isolated phrases about people and places and also to describe themselves and what they do.
They also displayed a lack of motivation and involvement during the speaking activities. Could game-based activities improve their acquisition? This is more than a mere discourse interrogation and constitutes the research question that oriented the yearlong project to scaffold better oral expression.
The intervention was based on specially designed speaking activities based on the use of some applications – mainly GooseChase, and Kahoot.
In order to make learning more meaningful, a specific game was crafted. This is based on a story where each student was a part of a game where they should gather as many experience points (XP) as possible. The experience points were counted using an application – class dojo, in which each student has an avatar under the form of a "monster" and can create an account in order to see in real time the number of the points they have earned. In this particular game, monsters are far from the "horrid" category, they belong to the game and are fun, never scary. At the end of each module, the score was displayed so that the students would know their position in the game.
In order to avoid boredom, during the school year some updates in the game showed up – for example, the students were given the opportunity to assess their answers (self-assessment) or the classmates answers (peer-assessment). There were also more difficult activities (for example they were supposed to speak for a longer period of time or on a more difficult topic) – a boss fights in the game.
In order to measure the students' acquisition, progress tests and observation grids were applied on a monthly basis, by making use of apps and gamification, and being presented as boss fights in the game. The progress tests were under the form of oral tasks, which focused on the competences that

were underperformed by students at the beginning of the school year and began being structured during the period before the test.
As part of the research, observation grids and a questionnaire to monitor their involvement and motivation were used as well. If the observation grids were filled in during each class, the questionnaire was administered at the end of the school year.
The grids focused on each student's involvement during classes, and monitored attention, participation, initiative and perception using a 1-5 scale.
The questionnaire looked into the students' perception about the new way of learning French, but also into how they perceive the French language, and was not based on a validated scale.

2.2 Examples of activities

Example 1: This activity is based on the GooseChase app, an application which allows us to create treasure hunts in town. This was used for homework. The app permits answers under the form of a photo, GPS location or a short text. The students were asked to find different places and objects in town. They were divided into 5 groups (the maximum number of teams allowed by the app) and the answer should have been given by a member of a team. If another member found a better place/object, s/he was allowed to change the answer.
First, the answers were assessed by the other teams, and then, they became the context for a speaking activity.
The images below display the missions designed during this quest and two answers. The students were asked to briefly present and describe the object in the picture. (Voici une église. Elle est grande, blanche, et se trouve à côté du parc.). For this activity, each member of the team would receive 10XP on ClassDojo if they successfully presented the picture, but also the number of points given by the other classmates for completing the task. The points were added manually, by the teacher, after assessing each teams' contribution.

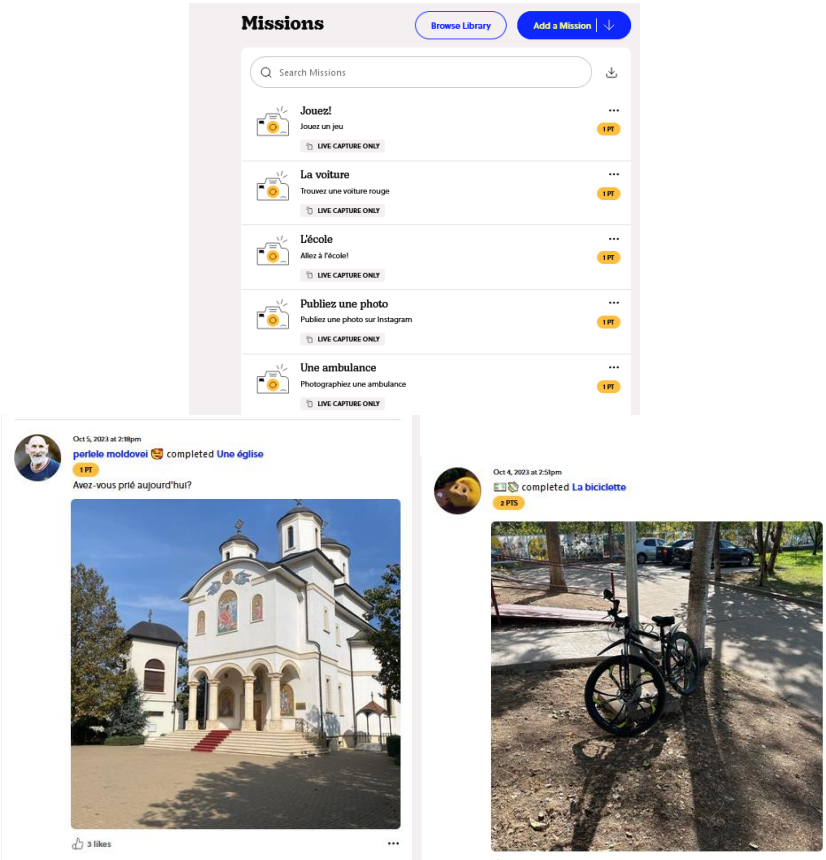


Fig. 1. Example of students' answers in the GooseChase app

Example 2: This activity is based on Kahoot app (Submarine Squad mode). The students were supposed to describe a certain object or symbol without using its name.

In this type of activity, the whole class is a team who runs from a big fish, and must answer a series of questions in order to pass the level. At the end of each level, the app choses one or more spokespersons who are supposed to describe an object/symbol and the other classmates must select the object(s) on their phones based on the description they hear. The number of spokespersons is equal to the number of students. The bigger the number of spokespersons, the more difficult it is to select all the objects, as they should pay attention to all of the spokespersons.
At the end of the game, each participant receives a number of XP points on ClassDojo equal to the number of objects they managed to guess.



Fig. 2. Example of answer extracted from the Kahoot! App

In the image above (print screen from the application), one can notice in the foreground the way the screen looks when describing the object (speaker) and in the background the way it looks for the classmates.
In the image below, there is an example of how the platform looks (the ClassDojo) that supported the gamification of the entire process.



Fig. 3. Students' achievement in the ClassDojo app

The example above displays a part of the class and their results. The names of the students are hidden because of the GDPR regulations.

3. Results

At the end of the school year, the students' speaking **competences improved**. Below, there is a chart to display the results regarding the results of the progress tests, for each competence identified as unstructured in the initial assessment (C1: Can describe simple aspects of his/her life, using simple

phrases and with previous preparation, C2: Can name an object and describe it, with previous preparation, C3: Can use a text in order to make a declaration) [10].

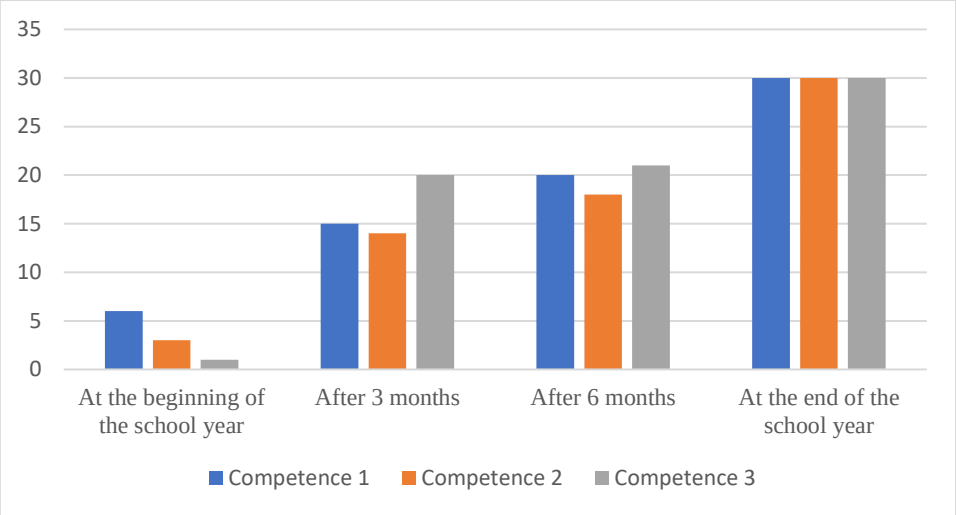


Chart 1. Students' results in the progress tests

As the results show, the students' competences started to improve after three months, and kept improving until the end of the school year, when all of the students reached the level A2.
Furthermore, some students managed to gain some competences specific to the B1.1 level or even the B1.2 level, as follows:

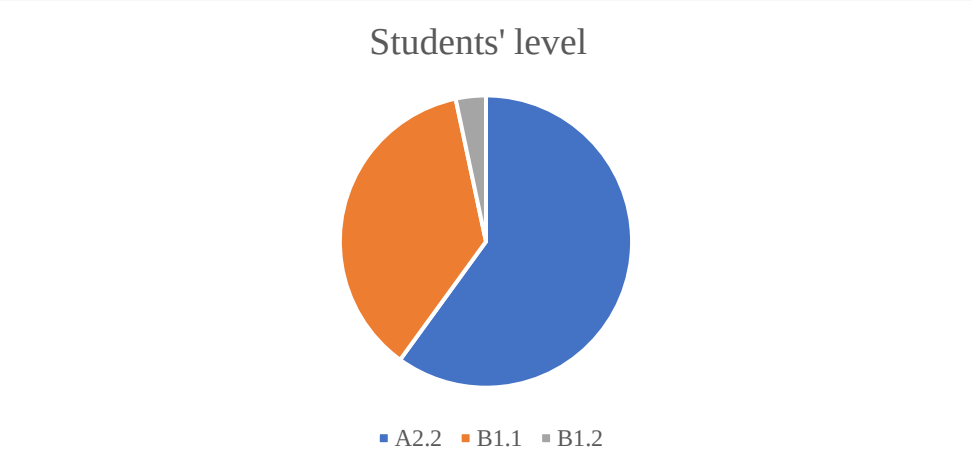


Chart 2. Students' level at the end of school year

According to the results at the end of the school year, the majority of students managed to reach the A2.2 level. There is also a significant number of students (11) which structured some of the competences from the B1.1 level, and a student who managed to reach the B1.2 level.
The observation grids, and also the results of the questionnaire showed that the students **motivation increased**. Below, there are some questions from the questionnaire and the corresponding students' answers:

Table 1: Questionnaire results

No.	***Question***	***Strongly disagree***	***Disagree***	***Neutral***	***Agree***	***Strongly agree***
1.	I enjoy speaking French.	0	0	0	8	22
2.	I feel confident speaking French in class	0	0	0	18	12
3.	I find French lessons very interesting.	0	0	0	14	16

4.	Learning French is fun for me.	0	0	0	2	28
5.	I believe I can succeed in learning French.	0	0	0	25	5
6.	I am not afraid of making mistakes.	0	0	6	12	12
7.	This approach motivated me to speak.	0	0	0	17	13

Integrated in a gamified approach, the applications functioned as an external trigger to stimulate the students' intrinsic motivation, helping to improve their competences in speaking and their involvement during the French classes.
Another external factor which led to increasing students' **involvement** was the game elements that were used to gamify the French class. As the students get more involved, they earn more points, leading to their progress in the game and getting them closer to the reward. As one of the homo zappiens characteristic is the short-term reward, the points and the boss fights provided them with what they needed to be more motivated and more involved.
Nevertheless, games also brought fun in class. In the questionnaire, all the students said that this approach was fun.

4. Conclusions

In conclusion, applications can be meaningfully used to develop the students' communication competences when teaching French. Integrating them into a gamified environment can lead to an increase in the students' motivation and involvement and can bring a lot of fun during classes. Meanwhile, gamification can create a framework for the meaningful use of more apps, making the approach smoother.
Competences improved: At the end of the school year, the results were positive. All of the students managed to reach the A2.2 level, as the progress tests have shown. There is also the case of a student who, from A1.1, reached the B1.2 level.
Motivation increased: As the observation grids showed, the students motivation increased and the questionnaire results displayed the same thing. If at the beginning of the school year the students did not like French (and mainly the speaking activities), they got to be willing to answer, because they wanted to get XPs and earn the game.
Involvement also increased: During the classes, the students were eager to speak and to get the points in order to progress in the game. As the observation grids and the questionnaire showed, students willing to take part to the speaking activities in order to get points and be as high as possible in the ranking.
Fun wins over unease: Gamification also brought more fun in class. As one of the students confessed, at the beginning they were playing for a good mark, but in the end, it was just for fun. At the end of the school year, some students said "let's do it next year too, even if we don't get any reward, just for fun!".

5. Limitations

Nevertheless, this study presents some limitations. Given the small number of participants, the results of the study cannot be generalized, as it can lead to bias. Moreover, in the absence of an experimental design there was no comparison group to measure the natural variations and the external factors.

REFERENCES

[1] Huizinga, J. (2023). Homo Ludens. Încercare de determinare a elementului ludic al culturii. Ed. Humanitas, Bucharest.
[2] Ween, W. and Vrakking, B. (2011), Homo Zappiens. Joc și învățare în epoca digitală. Ed. Sigma, Bucharest.
[3] Burston, J. (2015), Twenty years of MALL project implementation: A meta-analysis of learning outcomes in ReCALL Journal, 27, pp. 4-20, DOI:10.1017/S0958344014000159
[4] McCrocklin (2016), Pronunciation learner autonomy: The potential of Automatic Speech Recognition, in System 57, pp. 25-42, https://doi.org/10.1016/j.system.2015.12.013
[5] Godwin-Jones, R. (2017), Smartphones and language learning, in Language Learning and Technology 21(2), pp. 3-17, DOI:10.64152/10125/44607

[6] Saran, M.; Seferoglu, G., and Cagıltay, K, (2009), Mobile Assisted Language Learning: English Pronunciation at Learners' Fingertips, in Eurasian Journal of Educational Research 34(34), pp. 97-114
[7] Deterding, S. et al., (2011), From Game Design Elements to Gamefulness: Defining Gamification, in Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, DOI:10.1145/2181037.2181040
[8] Hamari, K., and Sarsa (2014), Does Gamification Work? — A Literature Review of Empirical Studies on Gamification, in The 47th Hawaii International Conference on System Sciences, DOI:10.1109/HICSS.2014.377
[9] Golonka, E. et al. (2014), Technologies for foreign language learning: a review of technology types and their effectiveness, in Computer Assisted Language Learning 27(1), pp. 70-105, https://doi.org/10.1080/09588221.2012.700315
[10] Council of Europe (2001). Common European Framework of Reference for Languages: Learning, teaching, assessment. Cambridge University Press.